Remarks/Arguments

This is a complete response to the Office Action mailed on 03 July 2007 in which claims 1-10 were rejected, claim 1 was subject to an objection, and claims 13, 15-16 were allowed. Claims 11-12 and 14 were previously canceled and claims 17-27 were previously withdrawn. Claims 2-4 and 8 are presently canceled. The limitations of claim 4 have been incorporated into claim 1, which is currently amended. Claim 13 is also currently amended to correct some minor structure errors. New claims 28-45 have been added. Support for new claims 28-45 is provided below. Claims 1, 5-7, 9-10, 13, 15-16, and 28-45 are pending. Reconsideration and further examination of the subject application are respectfully requested.

Support for New Claims

Support for new claims 28-31 is found on page 22, lines 8-12 of the specification.

28. The microprobe of claim 1, wherein the ISFET is configured to operate as a pH sensor.

29. The microprobe of claim 28, further comprising a second ISFET, wherein the second ISFET is configured to operate as a blood gas sensor, and wherein the second ISFET has a gate located proximate the aperture.

30. The microprobe of claim 7, wherein the ISFET is configured to operate as a pH sensor.

31. The microprobe of claim 30, further comprising a second ISFET, wherein the second ISFET is configured to operate as a blood gas sensor, and wherein the second ISFET has a gate located proximate the aperture.

Support for new claim 32 is found in original claim 10.

32. The microprobe of claim 31, further comprising an antenna and a capacitor, wherein the capacitor is electrically coupled to the ISFET, the second ISFET, the temperature sensing diode, and the antenna, and wherein the capacitor is configured to store electromagnetic energy received by the antenna.

Support for new claim 33 is found on page 23, lines 10-12 of the specification.

33. The microprobe of claim 32, further comprising a control module communicatively coupled to the ISFET, the second ISFET, the temperature sensing diode and the reference electrode.

Support for new claim 34 is found on page 27, line 28 of the specification.

34. The microprobe of claim 33, wherein the control module is hand-held.

Support for new claim 35 is found on page 23, lines 26-29 of the specification.

35. The microprobe of claim 33, further comprising an electromagnetic transmitter configured to wirelessly transmit data from the ISFET, the second ISFET, and the temperature sensing diode to the control module.

Support for new claim 36 is found on page 22, lines 18-21 of the specification.

36. The microprobe of claim 35, wherein the associated circuitry further comprises a logic array configured to perform statistical algorithms on the data from the ISFET, the second ISFET, and the temperature sensing diode.

Support for new claim 37 is found on page 23, lines 10-12 of the specification.

37. The microprobe of claim 1, further comprising a control module communicatively coupled to the ISFET and the reference electrode.

Support for new claim 38 is found on page 27, line 28 of the specification.

38. The microprobe of claim 37, wherein the control module is hand-held.

Support for new claim 39 is found on page 23, lines 26-29 of the specification.

39. The microprobe of claim 38, further comprising an electromagnetic transmitter configured to transmit data from the ISFET to the control module.

Support for new claim 40 is found on page 22, lines 18-21 of the specification.

40. The microprobe of claim 39, wherein the associated circuitry further comprises a logic array configured to perform statistical algorithms on the data from the ISFET.

Support for new claims 41-43 is found on page 28, lines 11-12 of the specification.

41. The microprobe of claim 40, wherein the control module is configured to provide a shock assessment index based on the statistical algorithms.

42. The microprobe of claim 40, wherein the control module is configured to provide a triage index based on the statistical algorithms.

43. The microprobe of claim 40, wherein the control module is configured to provide both a triage index and a shock index based on the statistical algorithms.

Support for new claim 44 is found on page 26, lines 5-10 of the specification.

> *44. The microsensor system of claim 13, wherein the microprobe is configured to be broken off of the cantilever arm once the microprobe is inserted into dermis.*

Support for new claim 45 is found on page 26, lines 16-19 of the specification.

> *45. The microsensor system of claim 13, wherein the microsensor system is flexible, such that the microsensor system is configured to conform to the skin of a patient.*

35 USC § 102 Rejection (*Koning*)

Claims 1-3 and 8 have been rejected as being anticipated by U.S. patent 4,534,825 issued to Koning et al. (*Koning*). Claims 2-3 and 8 have been canceled. As such, the rejection against them is considered moot. As for claim 1, it has been amended to incorporate the limitation of claim 4 that the housing is a hermetically sealed encapsulant. This limitation is not found in *Koning*. Because this limitation is not found in *Koning*, Applicants respectfully request that the 102(b) rejection be withdrawn.

35 USC § 103 Rejection (*Koning & Abreu*)

Claims 4 and 9 have been rejected as being obvious in light of *Koning* in view of a published U.S. patent application 2002/0049389 by Abreu (*Abreu*). Applicants respectfully traverse the rejection because to modify the probe of *Koning* in the manner suggested by the Examiner would render *Koning* unsatisfactory for its intended purpose.

> *The proposed modification cannot render the prior art unsatisfactory for its intended purpose.* MPEP 2143.01(V)

The probe disclosed in *Koning* utilizes an infusion channel to deliver calibrating fluid to a chamber formed in the catheter. (*Koning* col.2, lines 63-65) If the probe of *Koning* were to be hermetically sealed as discussed in *Abreu* the purpose of *Koning* would be defeated because no calibrating fluid could pass through a hermetically sealed probe. Hermetically sealing a catheter defeats the purpose of using a catheter since no fluid can pass through it.

For these reasons, Applicants respectfully request withdrawal of the 103(a) rejection of claims 4 (the limitations of which have been incorporated into amended claim 1) and claim 9 (which is dependent on amended claim 1).

35 USC § 103 Rejection (*Koning & Tomita*)

Claims 5 and 7 have been rejected as being obvious in light of *Koning* in view of U.S. patent 5814280 to Tomita et al. (*Tomita*). Claims 5 and 7 are dependent on amended claim 1. Because amended claim 1 is neither anticipated nor obvious, as shown above, Applicants respectfully request withdrawal of the 103(a) obviousness rejection of claims 5 and 7.

35 USC § 103 Rejection (*Koning & Ishikawa*)

Claim 10 has been rejected as being obvious in light of *Koning* in view of U.S. patent 6447448 to Ishikawa et al. (*Ishikawa*). Claims 10 is dependent on amended claim 1. Because amended claim 1 is neither anticipated nor obvious, as shown above, Applicants respectfully request withdrawal of the 103(a) rejection of claim 10.

Claim Objection

Claim 1 was objected to for an informality. In order to comply with the Examiner's requirement, Applicants have amended the appropriate section of claim 1 to read "ion sensitive field effect transistor (ISFET)."

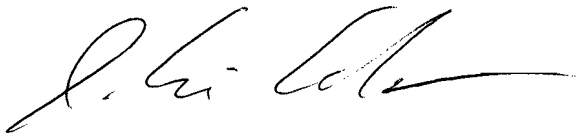
Conclusion

Applicants respectfully request withdrawal of the rejections of claims 1, 5-7, 9-10, 13, 15-16, and 28-45 and the objection to claim 1. Applicants respectfully submit that

claims 1, 5-7, 9-10, 13, 15-16, and 28-45 of the present application are in condition for allowance.

No Fee is required for this response.

Respectfully Submitted,



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